

Memorandum



140.25

Date:

May 29, 1985

To:

Jose Vargas, Al Cuplin, Ricardo Cruz, Hugh Hayashi, Del Young

Gene Jones, City Purchasing

From:

Timothy C. Croll

Subject

New WDOE Dangerous Waste Regulations on PCB's: Dispo

Options

Meeting: May 30, 1985

The May 23 meeting in Olympia between representatives of the electrical utilities, and Ross Potter of WDOE was helpful in further clarifying the new regulations concerning PCB's. DOE's Discussion Paper is attached for people who have not already received it. (I)

EAD has been further exploring the disposal options that are now available. We have had discussions with several potential disposal facilities, and with representatives from the utilities. The situation is still somewhat uncertain. The utilities are still in the process of deciding which is the best course of action. No disposal facilities in Washington are currently permitted to take PCB wastes. However, any of the companies that previously bought contaminated oil (\$50ppm), or transformer carcasses, may apply to DOE for "Interim Status" as treatment, storage or disposal (tsd) facilities, and be "grandfathered" in. (See Attachment I, QU.# 8, P.8)

Once Interim Status is applied for, it only takes a short while to process the paperwork. However, as you see from DOE's answer to Qu.-#-8, the standards for handling the waste are less stringent, and so generators (such as Seattle City Light) continue to incur future Superfund risks if the wastes are mishandled.

A list of options developed for EAD for disposal of those non-TSCA (DOE-regulated) PCB wastes is attached (II).

At this time we think the most prudent course of action to relieve the immediate problem of overcrowding at the salvage yard is:

Option III (c)

- a) Send transformer carcasses that held 50-499 ppm PCB for incineration through our current arrangement with Environmental International.
- b) Send transformer carcasses that held less than 5ppm PCB to a salvage yard (such as Ross Electric) when they have received Interim Status. (Superfund potential minimum with low level contamination.)

531-L(1-83)

J. Vargas, A. Cuplin, R. Cruz, H. Hayashi, D. Young, G. Jones
Page 2
May 29, 1985

- c) Hold on to 5-49 ppm carcasses for the time being, although we can only store for 90 days.
- d) Send ≤ 50ppm oil to a Fuel Recycler (such as our former buyer, Petroleum Reclaiming) when they have received Interim Status.

(If no facility receives Interim Status shortly, we may have to send some of this oil for incineration with the > 50ppm oil to relieve storage problems.)

We would like to discuss all of these options further at the May 30 meeting to arrive at a group recommendation for the Superintendent.

CL:mbm

Attachments: as noted

cc: B. Johnson, City Purchasing

cc: * Hardy

* Macdonald
Croll
J.Fletcher
Jerochim
DeVries

* I.Jackson

* G.Thompson

* C.Parsons
Luboff
Dyckman

* EAD 980.0

* File

* w/Attachment I & II
Others Attachment II only

CTY0069161







STATE OF WASHINGTON DEPARTMENT OF ECOLOGY

Mail Stop PV-11 • Olympia, Washington 98504 • (206) 459-6000

DISCUSSION PAPER ON POLYCHLORINATED BIPHENYL DANGEROUS WASTES

Department of Ecology May 15, 1985

On April 15, 1985, the Department of Ecology adopted amendments to chapter 173-303 WAC, Dangerous Waste Regulations, that included certain polychlorinated biphenyl (PCB) wastes as dangerous wastes. These wastes will be subject to special management and handling standards because of the risks they may pose to public health and the environment when disposed of improperly. The actual regulations that identify PCB wastes are attached at the end of this discussion paper. The requirements for how these wastes must be managed have not been included because of their size, but copies can be obtained by writing to the address shown below.

The purpose of this discussion paper is to provide a general description of what will be the effects of the new PCB waste regulation, and to answer some specific questions that have been raised about the new requirements. Any questions or issues not discussed below can be brought to the department's attention by contacting the following:

Ross Potter

Hazardous Waste Section, PV-11

Department of Ecology

Olympia, WA 98504

Telephone: (206) 459-6303

WHEN

The new rules go into effect on May 15, 1985. After that date, certain PCB wastes will be dangerous wastes and will have to be managed accordingly.

WEAT IS COVERED

The new rules will only cover wastes which contain PCB at less than fifty parts per million (50 ppm) concentration. Wastes containing 50 ppm PCB or greater are regulated by the U.S. Environmental Protection Agency (EPA) under 40 CFR Part 761, and thus are excluded from the department's dangerous waste rules. In addition, may PCB wastes, even those less than 50 ppm, can also be excluded from the department's requirements if they are: stored in accordance with federal requirements for greater than 50 ppm PCB wastes; and, within one year, are disposed of or incinerated at facilities permitted under federal standards to manage greater than 50 ppm PCB wastes.

Specifically, the department's rules will regulate the following types of wastes if they contain PCB (at less than 50 ppm):

- Cooling and insulating fluids from transformers and capacitors that are being salvaged, rebuilt or discarded, except when the fluids are reused in the transformers or capacitors.
- 2) Cores, including core papers, from unrinsed transformers or capacitors that are being salvaged, rebuilt or discarded. (Note—If the transformer or capacitor has been rinsed, then the core is not regulated.)
- 3) Unrinsed transformers and capacitors that will no longer be used for their intended use and that are being salvaged, rebuilt or discarded. (Note—If the transformer or capacitor has been rinsed, then it is not regulated.)
- 4) Rinsate from the rinsing of transformers or capacitors that are being salvaged, rebuilt or discarded, unless the rinsate is reused in the transformers or capacitors.

The quantity of these wastes also affects how they are covered by the department's regulations. The threshold for regulation purposes is 400 pounds per month or per batch ("batch" means any amount of waste which is generated less often than once a month—e.g., every three months, twice a year, etc.). If a person produces a listed PCE waste in excess of 400 pounds, then he is subject to the full Dangerous Waste Regulations and all handling requirements. If the person's waste does not exceed 400 pounds, then he is only subject to certain limited requirements of the department's rules. The specific requirements are discussed in more detail, below.

(Note--The quantity limit is currently 400 pounds, however, this limit will be reduced to 220 pounds (100 kilograms) by the end of 1985. Amendments to the department's regulations to reduce the quantity limit will be proposed in the summer of 1985. Affected persons should contact the department for further information on these amendments.)

WHO IS AFFECTED

The persons most likely to be affected by the new rules after they become effective are:

- Businesses which receive transformers or capacitors for scrap metal or rebuilding purposes;
- Public Utility Districts (PUD's);

Rinsing involves the following steps: First, draining the device of all free flowing liquid; second, filling the device with solvent that readily solubilizes PCB (e.g., kerosene, toluene) and letting it stand for eighteen hours; last, draining the device thoroughly and collecting all the solvent.

- Electrical energy production and distribution systems (e.g., WPPSS and BPA);
- Industries which own or operate their own on-site transformers and espacitors.

HOW TO COMPLY

In general, the following PCB wastes will not be subject to the department's dangerous waste regulations. Persons handling these wastes in the manner described will not have to comply with the requirements of chapter 173-303 WAC.

- 1) Any PCB wastes whose disposal is regulated by EPA under 40 CFR 761.60 (generally, greater than 50 ppm PCB).
- Any transformers, capacitors or cores which have been drained and rinsed.
- 3) Any transformers, capacitors, cores, fluids and rinsate which (even though less than 50 ppm PCB) are stored in accordance with 40 CFR 761.65, and within one year are sent to a facility permitted by EPA to incinerate PCB under 40 CFR 761.70 or to dispose of PCB under 40 CFR 761.75.
- Transformers and capacitors sent, with the fluids still in them, to a salvager or rebuilder. (Note--The salvager or rebuilder is responsible for all wastes subsequently generated from his salvaging or rebuilding activities, and all applicable requirements of the dangerous waste rules must be met by the salvager or rebuilder. Only the person who sends the transformers or capacitors is relieved from the regulations.)
 - 5) Fluids and rinsate from transformers or capacitors which are reused, by the person who owns the transformers or capacitors, in his own transformers or capacitors. (Note—A person who sells or transfers fluids and rinsate to another person for use in their transformers or capacitors does not qualify for this relief from the regulations. In addition, fluids and rinsate must be reused within one year after drainage and collection or else they will become subject to the dangerous waste regulations.)
 - Fluids and rinsate which are burned, by the owner of the transformers or capacitors from which the fluids/rinsate came, in his own boiler or industrial furnace. (Note-Amendments to the department's regulations will delete this exemption by the end of 1985. The definitions of what constitutes "boiler" and "industrial furnace" appear in WAC 173-303-040(8) and (43).)

Any PCB wastes which do not qualify for any of the regulatory reliefs described above will be subject to the requirements of chapter 173-303 WAC. In general, the kinds of past practices which will now be subject to the Dangerous Waste Regulations include, but are not limited to:

- The discarding of undrained or unrinsed transformers or capacitors at solid waste landfills;
- The discarding of cooling fluids and rinsate, including the discharging of these substances to the air, land or water, and the open burning of these substances;
- The salvaging, scrapping or rebuilding of transformers or capacitors that have been drained but not rinsed;
- The sales of fluids and rinsate from transformers or capacitors for use as lubricants or fuels;
 - The disposal at solid waste landfills of soils, rags, absorbents or other materials contaminated with PCB during the salvaging or rebuilding of transformers or capacitors. (Note--This does not include contamination from leaks that occur while a transformer or capacitor is actually operating in active service.)

The following information discusses the specific requirements that apply to persons who conduct various activities with PCB wastes that are regulated under chapter 173-303 WAC. For the purposes of the following discussion, these regulated PCB wastes will simply be referred to as DW (for dangerous waste).

Specific Requirements for Less Than 400 Pounds

If a person produces less than 400 pounds (220 pounds by the end of 1985--see previous note) of DW in one month or one batch, then that person is only required to assure that his DW be sent to either a facility permitted by the department to manage dangerous waste, or a facility licensed to handle municipal solid waste, or a facility which beneficially recycles wastes. Persons with these small quantity DW will not be subject to all the requirements described below, however, they should become familiar with the methods for determining waste quantities and the small quantity requirements as specified in WAC 173-303-070(7) and (8). Anytime a person exceeds the quantity limit, even if he was previously below the limit, will be subject to the specific requirements described below.

Specific Requirements for Generators

These requirements appear in WAC 173-303-170 through 173-303-230. In general, a generator (any person who produces DW in excess of the quantity limit) must satisfy the following requirements:

- 1) The generator must notify the department that he is generating DW and obtain a special identification number;
- 2) DW must be properly packaged according to U.S. Department of Transportation standards in containers or tanks;
- 3) DW may not be kept by the generator on his site for more than ninety days. If a waste accumulates for more than ninety days, then the generator must obtain a facility permit for DW storage. While holding

DW on-site, the generator must have certain contingency and personnel training plans to assure safe accumulation;

- 4) DW must be sent to a facility permitted by the department to accept and manage that DW;
- 5) DW shipments must be sent with an accompanying Uniform Manifest that identifies the DW, the generator, the transporter and the receiving facility. DW shipments may only be transported by persons who have notified with the department as DW transporters;
- 6) The generator must keep certain records, and must report annually to the department, on a specific form, the type and amount of DW generated. The generator must also notify the department whenever he has shipped a DW that did not arrive at the receiving facility within forty-five days.

Specific Requirements for Transporters

These requirements appear in WAC 173-303-240 through 173-303-270. In general, a transporter (any person who transports regulated DW) must do the following:

- The transporter must notify the department that he is transporting DW and obtain a special identification number;
- Manifests for DW shipments must be kept with each shipment. Manifests and shipments must be delivered to the designated receiving facility;
- 3) The transporter wust keep certain records;
- 4) The transporter must report to the department any discharges (e.g., leaks, spills) that occur during transport, and must clean up those discharges.

Specific Requirements for Pacilities

These requirements appear in WAC 173-303-280 through 173-303-840. In general, a facility (any place at which DW is treated, stored or disposed of) must be in compliance with the following requirements:

- 1) The department must be notified that the facility is receiving DW and a special identification number must be assigned. The facility must also have a permit to be able to operate;
- 2) The facility must be secured with a fence or other device, and proper signs must be posted;
- 3) Certain plans and procedures must be followed at the facility for analyzing wastes, training personnel, responding to emergencies, monitoring groundwater (when necessary), closing the facility, and providing funds for closure and insurance;

- 4) Certain types of monitoring and inspections must be routinely conducted;
- 5) Specific management techniques must be followed for each type of process to assure safe handling of the DW;
- 6) The facility must be sited away from certain areas (e.g., flood plains, earthquake faults) and buffer zones must be maintained in case of fires or explosions;
- Certain records must be kept, and the facility must report annually on the types and amounts of DW managed and the methods of management used.

QUESTIONS AND ANSWERS

A number of questions were raised during the public review and comment process when the department's new PCB rules were being developed. The following information is intended to answer the most common questions for those people who may have similar concerns. Any questions not addressed below should be addressed to the department.

Question #1

The department did not set a lowest concentration limit for regulating PCB wastes, thus any concentration could be covered from 50 ppm on down. Why didn't the department set a minimum concentration, and how would a PCB waste generator show that his PCB levels are so low they should not be regulated?

Answer

The legislature chose not to identify a lower limit in SSB 3201 (state law which authorizes the department to regulate PCB wastes). The implication is to regulate PCB to as low a concentration as possible. Drinking water standards for PCB are recommended by EPA to be approximately 0.08 parts per billion. A representative of a PUD association testified at a public hearing that a lower limit could be set later, through petitions to the department, and that the regulations should be adopted without delay.

The regulation does not include a lower limit. A petition process is available to any person to ask the department to exempt PCB wastes below certain concentrations. Health and environmental effects of PCB at low concentration are difficult to document and tend to disagree depending on specific situations, type of contact (e.g., skin, ingestion), length of contact, and study group involved. The petition process will allow each person to provide documented evidence justifying a lower limit for their wastes, and on which the department can base a rational and safe standard for each circumstance.

Submit / Review / Deft. Recommends

Question #2

If a PCB waste generator manages his wastes in accordance with the federal standards for PCB, will such management be subject to the dangerous waste requirement?

Ansver

Although we could impose additional standards on such management, we believe that the federal management standards are reasonably safe and that additional state requirements are not necessary at this time. The department excludes any transformers or capacitors, and any liquids therefrom, if these PCB wastes are handled in compliance with federal standards for storage, incineration and disposal of federally regulated PCB.

Question #3

Are spills of PCB oil from transformers which are in active operation covered by the amendments?

Answer

Spills of certain hazardous substances are regulated. A PCE would have to exceed 100 ppm to be a hazardous substance under chapter 173-303 WAC. At that level, EPA would regulate the cleanup of the spilled material, so it would be excluded from our rules. At this time, the department will not regulate, as dangerous waste, spills from transformers or capacitors while they are in operation. Spills from discarded or salvaged transformers or capacitors that have not been rinsed would be dangerous waste.

Question #4

Can persons reuse PCB oils in their transformers?

ADSVET

The department will not regulate the reuse of the oils in the person's own transformers. This is considered "closed loop" recycling and is exempt.

Question #5

At what time would a person who owns and uses a transformer or capacitor have to decide whether or not it is designated as dangerous waste?

Ansver

The department has included language to indicate that a transformer or capacitor could be designated as dangerous waste when it would no longer be used for its intended use. The decisionmaker in this case will be the owner/user of the transformer or capacitor. The owner/user will typically remove the device from service and take it to a staging area or collection center, at which time he will evaluate the continued usability of the device. The department believes that the owner/user is in the best position to make this decision. If, in the future, the department finds

that persons are abusing this (e.g., the owner/user is keeping a device for several years, claiming he has not yet decided whether or not he intends to continue using the device), then we may at that time choose to limit the time in which a decision must be made.

Question 16

How will the selling and burning of PCB oils for fuel be affected by these amendments?

Answer

The burning of PCB transformer oil as fuel will in fact become regulated in many circumstances, and persons who generate these oils and give or sell them to be used or to be blended for use as fuel will be subject to the dangerous waste generator standards. Blenders and burners will be required to obtain facility permits. Currently, however, persons who generate such wastes, but who burn these wastes themselves in their own boilers or industrial furnaces, are exempt from the department's regulations. The department will be reviewing this exemption later this year and opportunity will be provided to recommend amendments to broaden or tighten this exemption.

Question #7

When calculating the quantity of dangerous waste being generated, what part of a PCB waste should be included? Is the weight of the transformer or capacitor included in the quantity calculation?

Answer

WAC 173-303-160 states that containers "shall not be considered as a part of the waste when measuring or calculating the quantity of a dangerous waste." The department would consider transformer and capacitor bodies to be containers. Thus, for purposes of calculating waste quantity, the shell of the transformer or capacitor should not be included. The weights of fluids and rinsates would be counted, and the weights of cores in unrinsed transformers or capacitors would be counted. For example, if a transformer is drained but not rinsed, then the generator would determine the weight of the drained fluid and the weight of the core, add these weights and, if the sum exceeds 400 pounds (soon to be reduced to 220 pounds—see earlier note), then the wastes would be regulated DW. Persons who must determine whether or not quantity limits are being exceeded should review WAC 173-303-070(7) and (8) to learn more about determining waste quantities.

Question #8

Some businesses are currently receiving PCB wastes for storage, recycling, fuel blending and/or disposal. Bow do such businesses obtain any necessary permits from the department, and what will be their permit status?

Answer

The department allows, under WAC 173-303-805(3), any person who has been receiving wastes that are newly designated as dangerous because of regulation amendments to qualify as an interim status facility. Interim status is essentially a method of "grandfathering" existing facilities into the state's dangerous waste program. There are many advantages to interim status, including less stringent standards and no need to obtain a final status permit (a process which can take up to two years) before operations at the facility can proceed. Thus, a PCB waste fuel blender, for example, can apply for interim status and then continue to conduct his blending activities in accordance with the interim status management standards of chapter 173-303 WAC.

To qualify for interim status, a person who is subject to the DW facility requirements must satisfy the following conditions:

- He must be operating, on May 15, 1985, a facility which manages (e.g., blends, burns, disposes) PCB wastes that are designated by the department's amendments. In other words, he cannot bring a new facility into operation after May 15 and be able to qualify for interim status;
- 2) He must submit a notification form (obtainable from the department) to the department by August 15, 1985. This form notifies the department that the person is operating a facility, and allows the department to assign an identification number to the facility;
- 3) He must submit a Part A permit application form (obtainable from the department) to the department by November 15, 1985. This form describes the facility management activities, including type and amount of waste handled, and type of management conducted; and
- 4) He must begin complying with the interim status facility requirements (these are specified in WAC 173-303-400) as soon as he begins managing DW.

SEA315585

OPTION

CARCASSES

OIL

DOE D.W. RECS.

TSCA

CERCLA

IMMEDIATE

QUESTIONS/

SEA315586

1		į								
	OPTION	CAI 50 - 499	RCASSES 5 - 49	₹5	01L ₹ 50	DOE D.W. RECS.	TSCA	CERCLA PRUDENCE (Long term cost	IMEDIATE COST	QUESTIONS/ ISSUES
	111. b)	.Ditto	To salvag	e yard	Ditto	Carcs. >50 exempt Carcs. <50 and oil: As III a) above.	Ditto	Additional concern re improper handling of 5-49 carca.	Cheaper than above as only carcs. > 50 high.	7
	III. c)	.Ditto	emp. continue corage	To salvag yard.	e ,,Ditto	***************************************	As III. a) abov	*	••••••	5-49 cercasses still unresolved.
	IV. Treat Carcasses as TSCA/DOS Oil as TSC		III a), b),	c)	Incinerate	Oil exempt. A Carcs. as IIIs),b),c)	ll oil as TSCA	Ditto as III above, but less concern about oil (see II)	Carcs am III. Oil- High	Less recycling.
	V. Ireat Carcasses and 011 as DOE	To sai	lvage yard	-	To oil recycler	All included. Facility permit; Storage; Record-keeping.	K/A	+ Worst option re potential for mishandling materials.	Cheapest: Some payment for oil, maybe some payment for carcs.	Best reuse of materials, but too scarey re Superfund 50-499 carcasses.
_	VI. Ditto Alternative scenario	18 hour dispose at solve Do it or con Clean c	ent rinse - soak, drai of contam ent recycle urselves, tract out i arcasses ca d for resal	in, rinsate rinsing. in be	.,Ditto	All included. Do it ourselves - SCL would need tad permit. Contract out - facility needs permit. Storage &s regs.	N/A	Only concerns are oil (as II); Facility handlin of rinsste		We have the best control in this option, even if we contract out rinsing. Rinser can recycle solvent for further washing of our times. To do it ourselves would requise substantial remodeling and additional personnel. Good re recycling.
						Records re carcas and solvent ??	***			Further research needed to see if we want to rinse 50-499.
										Does Mine y really

with DOE regs.

SEA315587

• /	OPTION	CAI 50 - 499	RCASSES 5 - 49	₹ 5	01L ₹ 50	DOE D.W. REGS.	TSCA	CERCLA PRUDENCE (Long term cos	IMPEDIATE COST	QUESTIONS/ ISSUES
	III. b)	.Ditto	To salvage	e yard	Ditto	Carcs. >50 exempt. Carcs. <50 and oil: As III a) above.	Ditto	Additional concern re improper handling of 5-49 cares.	Cheaper than above as only carcs. > 50 high.	
	III. c)	.Ditto		To salvag yard.		A	s III. a) abov	* + 4 re		5-49 carcasses still unresolved.
	IV. Treat Carcasses as TSCA/DOE Oil as TSCA	•	III a), b),	c)	Incinerate	Oil exempt. Al Carcs. as IIIa),b),c)	l oil as TSCA	Ditto as III above, but less concern about oil (see II)	Carcs as III. Oil- High	Less recycling.
	V. Treat Carcasses and 0il as 00E	To sal	vage yard		To oil recycler	All included. Facility permit; Storage; Record-keeping.	N/A	+ Worst option re potential for mishandling materials.	Cheapest: Some payment for oil, maybe some payment for carcs.	Best reuse of materials, but too scarey re Superfund 50-499 carcasses.
	VI. Ditto Alternative scenario	18 hour soak, drain, dispose of contam. rinsate at solvent recycler. Do it ourselves, or contract out rinsing.			Ditto	All included. Do it ourselves - SCL would need tsd permit. Contract out - facility needs	N/A	Only concerns are oil (as II); Facility handlin of rinsate	Rinsing will cost, but we will get benefi 2gfrom sale of clean cores. Some payment for oil.	We have the best control in this option, even if we contract out rinsing. Rinser can recycle solvent for further washing of our tfmrs. To do it ourselves would require substantial remodeling and
-			rcasses can I for resale			permir. scorage as regs. Records re carcass and solvent ??	es			additional personnel. Good re recycling. Further research needed to see if we want to rinse 50-499.
										** Best long-term option.

Does Airs is really work.